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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,346

03/25/2005

Kalle Ahmavaara

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VIENNA, VA 22182-6212

EXAMINER

BALAOING, ARIEL A

ART UNIT

PAPER NUMBER

2617

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,346	Applicant(s) AHMAVAARA ET AL.	
	Examiner ARIEL BALAOING	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 19 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 19 recites the limitation wherein said APN is decrypted in said authentication server. It is however noted that paragraph 30 states that the parameters are only decrypted at the access point or selected service network and therefore does describe decryption at the authentication server.
2. Claims 30, 32-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Newly added Claims 30, 32-34 recite the limitations "a data structure", "a computer program product", and/or "a computer readable medium". These limitations are not included in the applicant's originally filed disclosure (with respect to the 371 filing date), and therefore constitute new matter.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 10, 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 10 recites the limitation "said APN" in the body of the claim. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 27 recites the limitation "said system" in the preamble of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 28, 30, 32-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 28, based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C 101 process must (1) be tied to another statutory class (such as a particular apparatus) of (2) transform underlying subject matter (such as an article or materials) to a different state or thing. If neither of these requirements is met by the claim, the method is not a patent eligible process under 35 U.S.C 101 and should be rejected as being directed to non-statutory subject matter. See *Diamond v. Diehr*,

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450 US 175, 184 (1981); *Parker v. Flook*, 437 US 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 US 63, 70, 71 (1972); *Cochrane v. Deener*, 94 US 780, 787-88 (1876).

The Supreme Court recognized that this test is not necessarily fixed or permanent and may evolve with technological advances.

Claims 30, 32-34 are drawn to a “program” *per se* as recited in the preamble and as such is non-statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

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Examples of acceptable language in computer-processing related claims :

1. “computer readable medium” encoded with _____
[a] “a computer program”
[b] “software”
[c] “computer executable instructions”
[d] “instructions capable of being executed by a computer”
2. “a computer readable medium” _____ “computer program”
[a] storing a
[b] embodied with a
[c] encoded with a
[d] having a stored
[e] having an encoded

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 12, 21, 27-36 are rejected under 35 U.S.C. 102(e) as being anticipated by O'NEILL (US 2003/0176188).

Regarding claim 1, O'NEILL discloses a method of providing access via a first network [**roaming**] to a service facilitated by a second network [**home network**] (abstract), said method comprising the steps of: a) using an authentication message [**authorization message**] to signal a service selection information [**network access identifier/service profile identifier**] via said first network to an authentication server

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[**AAA server**] means of said second network (abstract; paragraph 24, 31); and b) using said service selection information to connect to services provided over an access point [**access point**] indicated by said service selection information (abstract; paragraph 24, 31; actual services provided based on a combination of foreign and home operator policy).

Regarding claim 12, O'NEILL discloses an authentication server device [**authentication server**] for providing an authentication mechanism (abstract), said authentication server being configured: a) to extract from a received authentication message a service selection information for selecting a service (abstract; paragraph 24, 31); and b) to use said service selection information for establishing a connection to services provided over an access point indicated by said service selection information (abstract; paragraph 24, 31; actual services provided based on a combination of foreign and home operator policy).

Regarding claim 21, O'NEILL discloses a terminal device for providing access to a network service (abstract), said device being configured to set in an authentication message a service selection information for selecting said network service (abstract; paragraph 24, 31; actual services provided based on a combination of foreign and home operator policy).

Regarding claim 27, O'NEILL discloses a system [**figure 1**] for providing access from a first network [**roaming**] to a service of a second network [**home network**], said system comprising; a terminal device connected to the first network, said terminal device configured to provide access to a network service, said terminal device

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configured to set in an authentication message a service selection information for selecting said network service (abstract; paragraph 24, 31); and an authentication server device [**AAA server**] connected to the second network, said authentication server device for providing an authentication mechanism, said authentication server device being configured to extract from a received authentication message a service selection information for selecting a service, and to use said service selection information for establishing a connection to services provided over an access point indicated by said service selection information (abstract; paragraph 24, 31; actual services provided based on a combination of foreign and home operator policy).

Regarding claim 28, O'NEILL discloses a method of providing an authentication mechanism, said method comprising the steps of: a) extracting from a received authentication message a service selection information for selecting a service (abstract; paragraph 24, 31); and b) using said service selection information for establishing a connection to services provided over an access point indicated by said service selection information (abstract; paragraph 24, 31; actual services provided based on a combination of foreign and home operator policy).

Regarding claim 29, O'NEILL discloses a method of providing access to a network service, said method comprising the step of setting in an authentication message a service selection information for selecting said network service at a terminal device (abstract; paragraph 24, 31).

Regarding claim 30, O'NEILL discloses a computer program product embodied on a computer readable medium comprising code means configured to produce the

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steps of claim 1 when run on a computer device (abstract; paragraph 24, 31; it is inherently necessary to provide software and processing means to perform the processes disclosed by O'NEILL).

Regarding claim 31, O'NEILL discloses a processor device configured to produce the steps of claim 1 (abstract; paragraph 24, 31; it is inherently necessary to provide software and processing means to perform the processes disclosed by O'NEILL).

Regarding claim 32, O'NEILL discloses a data structure of an authentication message, said data structure being configured to include a service selection information for selecting a service (abstract; paragraph 24, 31; it is inherently necessary to provide software and processing means to perform the processes disclosed by O'NEILL).

Regarding claim 33, O'NEILL discloses a computer program product embodied on a computer readable medium, said computer program product comprising code means configured to produce the steps of claim 28 when run on a computer device (abstract; paragraph 24, 31; it is inherently necessary to provide software and processing means to perform the processes disclosed by O'NEILL).

Regarding claim 34, O'NEILL discloses a computer program product embodied on a computer readable medium, said computer program product comprising code means configured to produce the steps of claim 29 when run on a computer device (abstract; paragraph 24, 31; it is inherently necessary to provide software and processing means to perform the processes disclosed by O'NEILL).

Regarding claim 35, O'NEILL discloses a processor device configured to produce the steps of claim 28 (abstract; paragraph 24, 31; it is inherently necessary to provide software and processing means to perform the processes disclosed by O'NEILL).

Regarding claim 36, O'NEILL discloses a processor device configured to produce the steps of claim 29 (abstract; paragraph 24, 31; it is inherently necessary to provide software and processing means to perform the processes disclosed by O'NEILL).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 2-7, 13-16, 22-24, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'NEILL (US 2003/0176188) in view of MCINTOSH et al (US 2003/0139180).

Regarding claim 2, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, O'NEILL does not expressly disclose wherein said first network is a wireless local area network. In the same field of endeavor, MCINTOSH discloses wherein a first network is a wireless local area network (abstract). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify O'NEILL to include the teachings of MCINTOSH, since the use of wireless local area networks is conventional and commonplace in the art and allows a system to be designed using standardized protocols.

Regarding claim 3, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, O'NEILL does not expressly disclose wherein said second network is a cellular packet-switched network. In the same field of endeavor, MCINTOSH teaches wherein a second network is a cellular packet-switched network (abstract). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify O'NEILL to include the teachings of MCINTOSH, since the use of a cellular packet-switched network is conventional and

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commonplace in the art and allows a system to be designed using standardized protocols.

Regarding claim 4, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of O'NEILL and MCINTOSH further discloses wherein said cellular packet-switched network is a GPRS network (MCINTOSH – paragraph 50).

Regarding claim 5, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, O'NEILL does not expressly disclose wherein said authentication message is an EAP message. In the same field of endeavor, MCINTOSH teaches wherein an authentication message is an EAP message (paragraph 68, 71, 83). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify O'NEILL to include the teachings of MCINTOSH, since such a modification would provide authentication means using a standardized protocol.

Regarding claim 6, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of O'NEILL and MCINTOSH further discloses wherein said EAP message is an EAP SIM or EAP AKA message (MCINTOSH - 92).

Regarding claim 7, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of O'NEILL and MCINTOSH further discloses wherein said authentication message is an EAP Challenge Response message (MCINTOSH – 124-147).

Regarding claim 13, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, O'NEILL does not expressly disclose wherein said authentication mechanism is based on an EAP protocol.. In the same field of endeavor, MCINTOSH teaches wherein an authentication mechanism is based on an EAP protocol. (paragraph 68, 71, 83). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify O'NEILL to include the teachings of MCINTOSH, since such a modification would provide authentication means using a standardized protocol.

Regarding claim 14, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of O'NEILL and MCINTOSH further discloses wherein said received authentication message is an EAP Challenge Response message (MCINTOSH – 124-147).

Regarding claim 15, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. O'NEILL further discloses wherein said authentication server is a standalone authentication server (abstract; paragraph 24, 31), however, O'NEILL does not expressly disclose the use of a WLAN authentication server. In the same field of endeavor MCINTOSH discloses the use of a WLAN authentication server (paragraph 43-44). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify O'NEILL to include the teachings of MCINTOSH, since the use of wireless local area networks is conventional and commonplace in the art and allows a system to be designed using standardized protocols.

Regarding claim 16, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, O'NEILL does not expressly disclose wherein said authentication server is a GGSN. In the same field of endeavor, MCINTOSH discloses wherein said authentication server is a GGSN (paragraph 61, 65). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify O'NEILL to include the teachings of MCINTOSH, since the use of a cellular packet-switched network is conventional and commonplace in the art and allows a system to be designed using standardized protocols.

Regarding claim 22, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, O'NEILL does not expressly disclose wherein said authentication message is an EAP message. In the same field of endeavor, MCINTOSH teaches wherein an authentication message is an EAP message (paragraph 68, 71, 83). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify O'NEILL to include the teachings of MCINTOSH, since such a modification would provide authentication means using a standardized protocol.

Regarding claim 23, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of O'NEILL and MCINTOSH further discloses wherein said authentication message is an EAP Challenge Response message (MCINTOSH – 124-147).

Regarding claim 24, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of O'NEILL and MCINTOSH

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further discloses wherein said EAP message is an EAP SIM or EAP AKA message (MCINTOSH - 92).

Regarding claim 26, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, O'NEILL does not expressly disclose wherein said service is a GPRS service. In the same field of endeavor, MCINTOSH discloses wherein service is a GPRS service (paragraph 50). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify O'NEILL to include the teachings of MCINTOSH, since the use of a cellular packet-switched network is conventional and commonplace in the art and allows a system to be designed using standardized protocols.

14. Claims 8, 9, 17, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'NEILL (US 2003/0176188) in view of TOMOIKE (US 2002/0107964).

Regarding claim 8, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. O'NEILL further disclose wherein said service selection information comprises at least one network parameter. In the same field of endeavor, TOMOIKE discloses wherein information comprises at least one APN parameter (paragraph 42-44). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify O'NEILL to include the teachings of TOMOIKE, since APN's and NAI's (as disclosed by O'NEILL) were are-recognized equivalents at the time the invention was made and one of ordinary skill in the art would have found it obvious to substitute APN's for NAI's for identifying network services.

Regarding claim 9, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of O'NEILL and TOMOIKE further discloses wherein said at least one APN parameter comprises an APN, a username and a password (TOMOIKE – paragraph 42-44).

Regarding claim 17, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. O'NEILL further discloses wherein said service selection information comprises at least one network parameter (paragraph 24, 31), however, O'NEILL does not expressly disclose wherein at least one network parameter comprises an APN. In the same field of endeavor, TOMOIKE discloses wherein at least one network parameter comprises an APN (paragraph 42-44). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify O'NEILL to include the teachings of TOMOIKE, since APN's and NAI's (as disclosed by O'NEILL) were are-recognized equivalents at the time the invention was made and one of ordinary skill in the art would have found it obvious to substitute APN's for NAI's for identifying network services.

Regarding claim 25, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. O'NEILL further discloses wherein said service selection information comprises at least one network parameter (paragraph 24, 31), however, O'NEILL does not expressly disclose wherein at least one network parameter comprises an APN. In the same field of endeavor, TOMOIKE discloses wherein at least one network parameter comprises an APN (paragraph 42-44). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made

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to modify O'NEILL to include the teachings of TOMOIKE, since APN's and NAI's (as disclosed by O'NEILL) were are-recognized equivalents at the time the invention was made and one of ordinary skill in the art would have found it obvious to substitute APN's for NAI's for identifying network services.

15. Claims 10, 11, 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'NEILL (US 2003/0176188) in view of TOMOIKE (US 2002/0107964) and further in view of BUDDHIKOT et al (US 2003/00146464).

Regarding claim 10, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. O'NEILL further disclose wherein said service selection information comprises at least one network parameter. In the same field of endeavor, TOMOIKE discloses wherein information comprises at least one APN parameter (paragraph 42-44). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify O'NEILL to include the teachings of TOMOIKE, since APN's and NAI's (as disclosed by O'NEILL) were are-recognized equivalents at the time the invention was made and one of ordinary skill in the art would have found it obvious to substitute APN's for NAI's for identifying network services. The combination of O'NEILL and TOMOIKE further discloses wherein said APN is in said authentication message, However, the combination of O'NEILL and TOMOIKE does not expressly disclose wherein the parameter is encrypted. In a similar field of endeavor, BUDDHIKOT discloses wherein a parameter is encrypted (paragraph 24, 31). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of O'NEILL and TOMOIKE

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to include the teachings of BUDDHIKOT, since encryption and decryption of a message provides secure communication over a wireless communication link.

Regarding claim 11, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, the combination of O'NEILL and TOMOIKE does not expressly disclose wherein at least one of said APN parameters is encrypted so that it can only be decrypted at the network defined by the APN. In a similar field of endeavor, BUDDHIKOT discloses wherein at least one of said message parameters is encrypted so that it can only be decrypted at the network defined by the message. paragraph 24, 31). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of O'NEILL and TOMOIKE to include the teachings of BUDDHIKOT, since encryption and decryption of a message provides secure communication over a wireless communication link.

Regarding claim 18, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of O'NEILL and TOMOIKE further discloses wherein said APN is in said authentication message, However, the combination of O'NEILL and TOMOIKE does not expressly disclose wherein the parameter is encrypted. In a similar field of endeavor, BUDDHIKOT discloses wherein a parameter is encrypted (paragraph 24, 31). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of O'NEILL and TOMOIKE to include the teachings of BUDDHIKOT, since

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encryption and decryption of a message provides secure communication over a wireless communication link.

Regarding claim 20, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of O'NEILL and TOMOIKE further discloses wherein at least one of said APN parameter is forwarded by the authentication server to said access point (O'NEILL - paragraph 24, 31). However, the combination of O'NEILL and TOMOIKE does not expressly disclose forwarding the parameter in an encrypted manner. In a similar field of endeavor, BUDDHIKOT teaches forwarding a parameter in an encrypted manner (paragraph 24, 31). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of O'NEILL and TOMOIKE to include the teachings of BUDDHIKOT, since encryption and decryption of a message provides secure communication over a wireless communication link.

16. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'NEILL (US 2003/0176188) in view of TOMOIKE (US 2002/0107964) and further in view of LIOY et al (US 2003/0220107).

Regarding claim 19, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, the combination of O'NEILL and TOMOIKE does not expressly disclose wherein at least one of said APN parameters is decrypted in said authentication server. In a similar field of endeavor, LIOY discloses wherein at least one parameter is decrypted in an authentication server (paragraph 43). Therefore it would have been obvious to a person of ordinary skill in the art at the time

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the invention was made to modify the combination of O'NEILL and TOMOIKE to include the teachings of LIOY, since encryption and decryption of a message provides secure communication over a wireless communication link.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

HURTTA et al (US 2005/0117591) – Address de-registration from ip multimedia networks

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARIEL BALAOING whose telephone number is (571)272-7317. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, V. Paul Harper can be reached on (571) 272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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